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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/926,145	01/11/2002	Hans-Bernhard Bolza-Schunemann	P1.1547PCT-US	2529

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EXAMINER

HINZE, LEO T

ART UNIT

PAPER NUMBER

2854

DATE MAILED: 03/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/926,145

Applicant(s)

BOLZA-SCHUNEMANN, HANS-
BERNHARD

Examiner

Leo T. Hinze

Art Unit

2854

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 41-56 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 41-56 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 January 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3. 6) ☐ Other:

Art Unit: 2854

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: 20, 86, and 87.
2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the concave support surfaces of claim 47 and the convex support surfaces of claim 48 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 41, 43-48, 50-52, and 54-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Firm in view of Kusch, et al.

Art Unit: 2854

Firm teaches:

- a printing unit of a rotary printing press comprising: at least one form cylinder (B); a form cylinder barrel, said form cylinder barrel having spaced first and second cylinder barrel ends with first and second cylinder barrel end support surfaces (e.g. Fig. 1); a form cylinder intermediate support ring (b) with an outer support surface between said spaced first and second cylinder barrel ends; an ink unit, said ink unit having at least one of an ink roller (D) and an ink transfer cylinder (claim 41);
- wherein said intermediate support rings are fixed against relative rotation (ring rotates with cylinder) (claim 43);
- wherein said intermediate support rings are rotatable (ring rotates with cylinder) (claim 44);
- wherein said intermediate support rings are each circular support rings (cylinder B is cylindrical) (claim 45);
- wherein said support surfaces are level (e.g. Fig. 1) (claim 46);
- wherein said support surfaces are concave (a, Fig. 1, support surface is concave with respect to roller surface) (claim 47);
- wherein said support surfaces are convex (b, Fig. 1, support surface is convex with respect to roller surface) (claim 48);
- wherein said at least one form cylinder has a plurality of axially spaced printing plates (f) (claim 50);

Art Unit: 2854

- wherein each of said form cylinder and said least one of said ink roller and said ink transfer cylinder each have an axis of rotation, said axes of rotation being located on a common plane (e.g. Fig. 3, 4) (claim 51);
- wherein said at least one form cylinder and said at least one of said ink roller and said ink transfer cylinder form a printing component (“...constructed to simultaneously print said webs”, e.g. col. 1, lines 19-20) (claim 52);
- wherein said common plane extends at an angle (e.g. Fig. 3, 4) (claim 54);
- wherein each said intermediate support ring is located approximately in the center of its respective barrel (e.g. Fig. 1) (claim 55);

Firm does not teach:

- barrel end support surfaces and intermediate support rings on at least one of said ink roller and said ink transfer cylinder (claim 41);
- wherein said support surfaces are level (claim 46);
- wherein each said support ring is a Schmitz ring (claim 56);

Kusch teaches:

- the use of a bearing rings (3) on a cylinder in a printing machine, the cylinder being, for example, a plate cylinder, impression cylinder, or other cylinder (e.g. col. 4, lines 19-26) (claim 41);
- wherein said support surfaces are level (e.g. Fig. 1, surface of support (3) is level with surface of roller (2)) (claim 46);
- wherein each said support ring is a Schmitz ring (3, Fig. 1) (claim 56).

Art Unit: 2854

Regarding claim 41, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Firm to include intermediate and end support surfaces on the ink roller, because Kusch teaches that support rings are advantageous on any cylinder as part of a mechanism to ensure proper circumferential register of the cylinders.

Regarding claim 46, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Firm wherein said support surfaces are level, because Kusch teaches that level support rings are advantageous on any cylinder as part of a mechanism to ensure proper circumferential register of the cylinders.

Regarding claim 56, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Firm wherein each support ring is a Schmitz ring because Kusch teaches that a Schmitz ring is advantageous on any cylinder as part of a mechanism to ensure proper circumferential register of the cylinders.

Regarding claims 43-48, 50-52, 54, and 55, the combination of Firm and Kusch teaches all that is claimed as discussed above.

5. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Firm in view of Kusch, et al. as applied to claim 41 above, and further in view of Wood.

The combination of Firm and Kusch teaches all that is claimed as discussed in the above rejection of claim 41, except wherein said inking unit includes both said ink roller and said ink transfer cylinder.

Wood teaches a multiple width printing press with an ink unit (e.g. Fig. 1) containing both ink rollers (13, 15) and an ink transfer cylinders (14).

Art Unit: 2854

It would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Firm to include both ink rollers and an ink transfer cylinder, because Wood teaches that this is advantageous for an increased width printing machine whereby the printing an plate cylinders and the ink roll can be steadied at points intermediate their bearings to prevent their springing.

6. Claim 49 is rejected under 35 U.S.C. 103(a) as being unpatentable over Firm in view of Kusch, et al. as applied to claim 41 above, and further in view of Koppelkamm, et al.

The combination of Firm and Kusch teaches all that is claimed as discussed in the above rejection of claim 41, except further including a blanket cylinder having a plurality of axially spaced rubber blankets.

Koppelkamm teaches a printing unit with a plurality of rubber blankets (14.1, 14.2) axially spaced on a cylinder (4).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Firm to include a blanket cylinder having a plurality of axially spaced rubber blankets, because Koppelkamm teaches that this is advantageous for the economic production of multifarious product with a relatively low technical outlay.

7. Claim 53 is rejected under 35 U.S.C. 103(a) as being unpatentable over Firm in view of Kusch, et al. as applied to claims 41 and 51 above, and further in view of Erhard, et al.

The combination of Firm and Kusch teaches all that is claimed as discussed in the above rejection of claims 41 and 51, except wherein said common plane extends horizontally.

Art Unit: 2854

Erhard teaches a printing machine wherein the screen surface cylinder (16), ink transfer cylinder (17), and printing form support cylinder (18) are arranged with their axes on a common horizontal plane.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Firm wherein said common plane extends horizontally, because Erhard teaches that this is advantageous for providing a printing device which is compact and efficient.

Conclusion

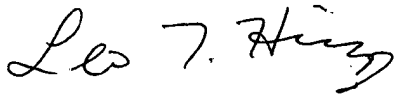
8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leo T. Hinze whose telephone number is (703) 305-3339. The examiner can normally be reached on M-F 8:00-5:30.

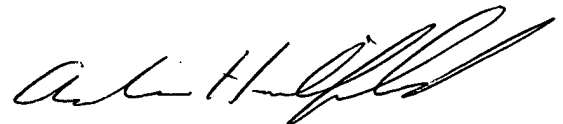
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on (703) 305-6619. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-0952.

Art Unit: 2854



Leo T. Hinze
Patent Examiner
AU 2854
March 3, 2003



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